The following is a more detailed discussion of this protection standard:

a. **National Environmental Policy Act of 1969:**

In 1969, Congress enacted the National Environmental Policy Act (NEPA), which requires the FCC to evaluate the potential environmental significance of the facilities it regulates and authorizes. Human exposure to Radio Frequency (RF) radiation has been identified as an issue the FCC must consider.

Beginning with the filing of applications after January 1, 1986, broadcast stations will be required to "certify compliance" with FCC prescribed guidelines on human exposure to RF radiation. The FCC is using as its processing guidelines, the American National Standards Institute's (ANSI) RF radiation protection guides (ANSI C95.1-1982). These exposure limits are expressed in terms of milli-watts per square centimeter.

These exposure limits are time averaged over any six minute period and vary depending upon the frequency involved:

Frequency Range (MHz)			Power Density (mW/cm^2)	
0.3	to	3	100	AM
3	to	30	$900/(Freq^2)$	
30	**to**	**300**	**1.0**	**VHF TV & FM**
300	to	1,500	Freq/300	UHF TV
1500	to	100,000	5.0	

(same as ANSI standard)

In the following formula:

$$D = \frac{SQRT(F^2 * [HERP + VERP])}{1.667 * SQRT(PD) * 3.2808}$$

Where:

D = the closest distance in meters that a human should come to an operating antenna (to obtain feet multiply by 3.2808)
F = typical relative field factor in downward direction (F = 1 is worst case main lobe)

HERP = Horizontal ERP in watts (above a dipole)
VERP = Vertical ERP in watts (above a dipole)
PD = highest Power Density in milli-watts/cm^2
SQRT = Square Root
Freq = Frequency in mega-cycles

The vertical radiation pattern of the FM antenna specified in this application is very narrow and therefore the power density as seen by an observer on the ground near the base of the tower will be less than 10 percent of the total ERP or .19 KW.

The application of the above equation (assuming maximum ERP), in our case, for a frequency of 106.3 MHz and a Power Density of 1.0 milli-watts results in a minimum distance of 7.97 meters (26 feet) from the antenna. Inasmuch as the lowest element on the proposed antenna will be approximately 31 meters (101 feet) above ground, it is self-evident that no hazard from radiation will exist to persons at ground. With regard to people which need to climb the tower, the tower will be fenced and/or marked by appropriate warning signs to insure safety, and if maintenance is to performed on the tower the station will sign off the air to insure compliance with the ANSI standard.

III. SUMMARY:

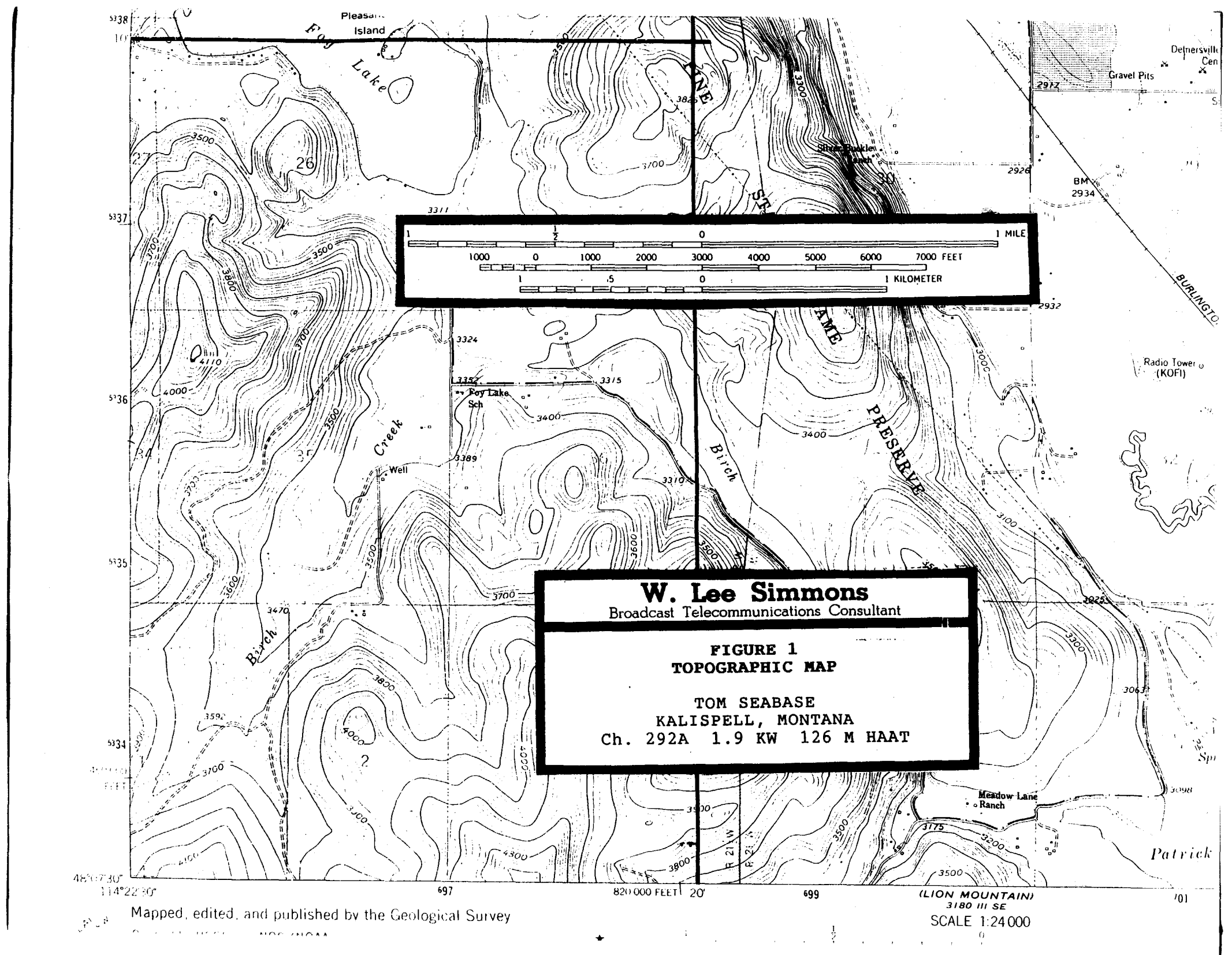
Tom Seabase proposes to construct a new FM facility on Channel 292A at Kalispell, Montana. This engineering proposal is in full compliance with the Commission's Rules.

IV. ENGINEER-APPLICANT AGREEMENT

W. Lee Simmons and Associates Inc. assumes no liability for any errors or omissions in the information hereby provided, and shall not be liable for any injuries or damages (including consequential) which might result from use of this engineering report. W. Lee Simmons and Associates Inc. assumes no liability for this report if it is accepted or rejected by the Federal Communications Commission. The Applicant agrees with the stated terms and conditions or this report is considered null and void and is not to be utilized in any way or filed with the Federal Communications Commission.

W. Lee Simmons

September 24, 1991. Broadcast Telecommunications Consultant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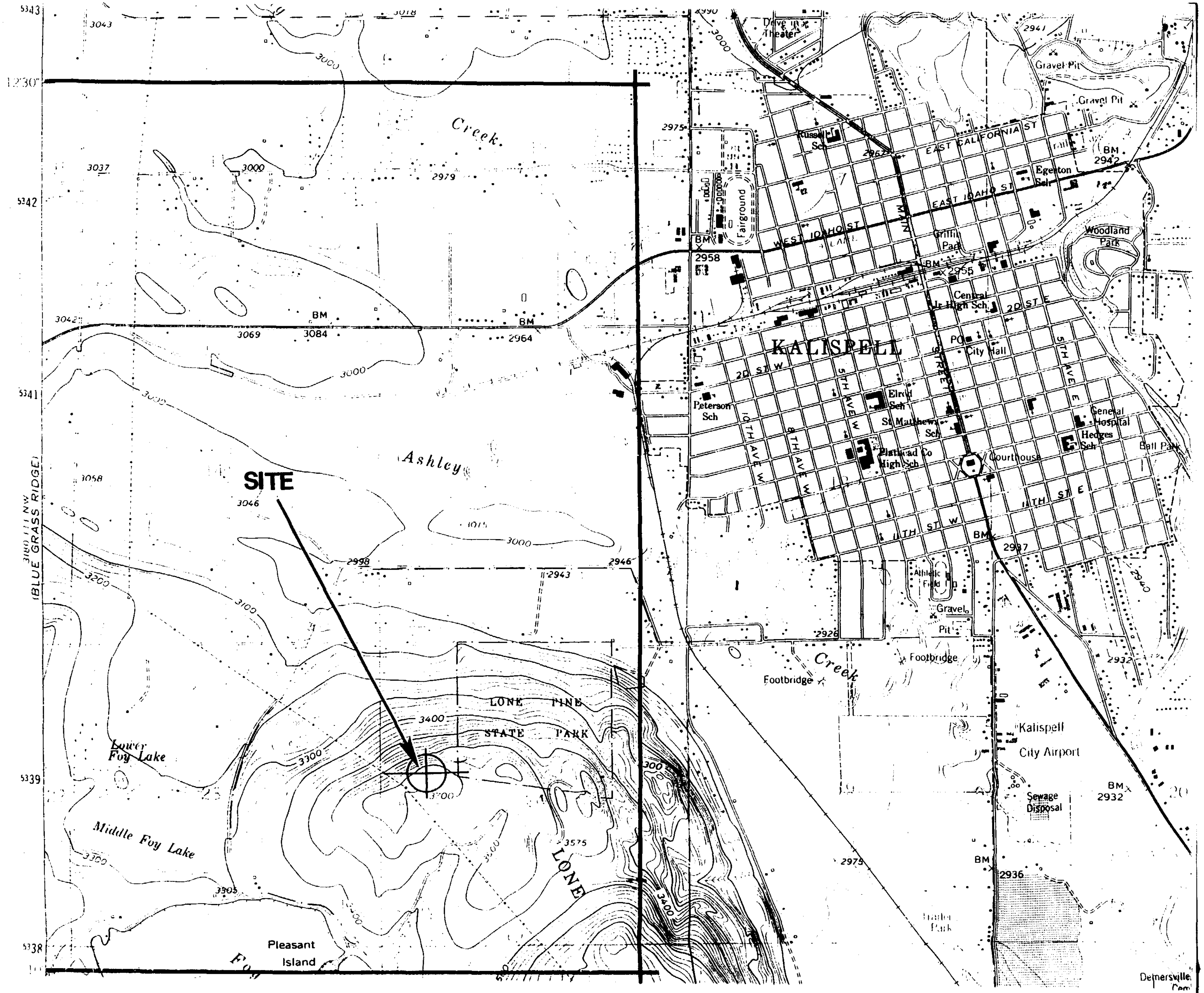
Broadcast Telecommunications Consultant
FIGURE 1
TOPOGRAPHIC MAP
TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 1.9 KW 126 M HAAT
1 MILE
7000 FEET
1 KILOMETER
Foy Lake
Pleasant Island
Gravel Pits
Foy Lake Sch
Well
Radio Tower (KOFI)
Meadow Lane Ranch
Birch Creek
PRESERVE
BURLINGTO
Patrick
(LION MOUNTAIN)
3180 III SE
Mapped, edited, and published by the Geological Survey
SCALE 1:24000


SITE
KALISPELL
LONE PINE STATE PARK
LONE
Ashley
Creek
Creek
Lower Foy Lake
Middle Foy Lake
Pleasant Island
(BLUE GRASS RIDGE)
Drive in Theater
Gravel Pit
Gravel Pit
Russell Sch
Egerton Sch
EAST CALIFORNIA ST
EAST IDAHO ST
WEST IDAHO ST
MAIN
Fairground
Griffin Park
Woodland Park
Central Jr High Sch
2D ST E
2D ST W
PO
City Hall
Peterson Sch
Elrod Sch
St Matthews Sch
Flathead Co High Sch
Courthouse
General Hospital
Hedges Sch
Ball Park
10TH AVE W
8TH AVE W
5TH AVE W
5TH AVE E
STREET
11TH ST E
11TH ST W
Athletic Field
Gravel Pit
Footbridge
Footbridge
Kalispell City Airport
Sewage Disposal
Trailer Park
Demersville Cem
BM 2958
BM 2955
BM 2942
BM 3084
BM 2964
BM 2937
BM 2932
BM 2936
3043
3037
3042
3069
3058
3046
3000
2979
2975
2967
2941
2998
2943
2946
2926
2932
2975
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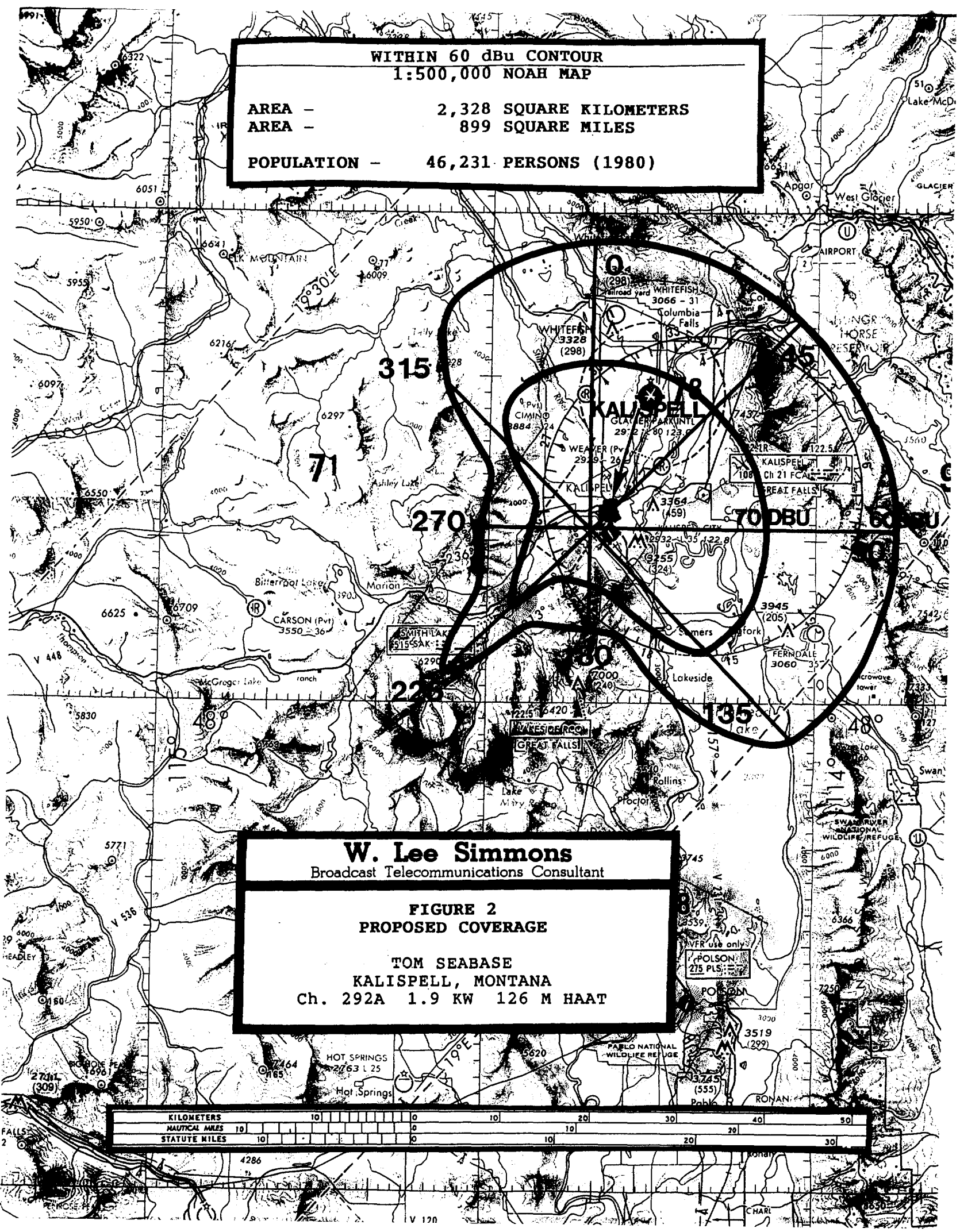
3100
3300
3400
3700
3575
3305
1230"
5343
5342
5341
5339
5338


WITHIN 60 dBu CONTOUR
1:500,000 NOAH MAP
AREA - 2,328 SQUARE KILOMETERS
AREA - 899 SQUARE MILES
POPULATION - 46,231 PERSONS (1980)
70 DBU
60 DBU
KALISPELL
W. Lee Simmons
Broadcast Telecommunications Consultant
FIGURE 2
PROPOSED COVERAGE
TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 1.9 KW 126 M HAAT
KILOMETERS
NAUTICAL MILES
STATUTE MILES

FM COVERAGE
****

TOM SEABASE-KALISPELL, MONTANNA

CHANNEL NO. 292 A FREQUENCY 106.3 MHZ

CENTER OF RADIATION 1169.0 METERS AMSL

COORDINATES: 48-10-34 / 114-20-53

BEARING DEGREES		3-16 KM AVERAGE	C.R. HAAT		E.R.P. (KW)	DISTANCE TO CONTOURS (KM) 70.0	60.0	54.0
0.	*	928.8	240.2		1.9	19.0	32.7	43.6
15.		921.1	247.9		1.9	19.3	33.2	44.1
30.		909.5	259.5		1.9	19.6	33.8	44.9
45.	*	909.7	259.3		1.9	19.6	33.8	44.9
60.		906.1	262.9		1.9	19.8	34.1	45.1
75.		893.7	275.3		1.9	20.3	34.8	45.9
90.	*	887.6	281.4		1.9	20.4	35.1	46.3
105.		886.8	282.2		1.9	20.4	35.2	46.3
120.		887.0	282.0		1.9	20.4	35.2	46.3
135.	*	903.0	266.0		1.9	20.0	34.3	45.2
150.		1047.2	121.8		1.9	13.2	23.8	32.7
165.		1234.5	-65.5	D	1.9	6.6	11.9	16.9
180.	*	1436.0	-267.0	D	1.9	6.6	11.9	16.9
195.		1335.0	-166.0	D	1.9	6.6	11.9	16.9
210.		1249.6	-80.6	D	1.9	6.6	11.9	16.9
225.	*	1060.5	108.5		1.9	12.6	22.7	31.1
240.		1125.4	43.6		1.9	7.9	14.2	20.3
255.		1165.2	3.8	D	1.9	6.6	11.9	16.9
270.	*	1155.8	13.2	D	1.9	6.6	11.9	16.9
285.		1166.2	2.8	D	1.9	6.6	11.9	16.9
300.		1191.3	-22.3	D	1.9	6.6	11.9	16.9
315.	*	1060.6	108.4		1.9	12.6	22.7	31.1
330.		962.2	206.8		1.9	17.5	30.3	41.2
345.		940.4	228.6		1.9	18.5	31.9	42.8
AVERAGE	*	**1042.8**	**126.2 Meters**					
		AREA IN SQUARE KILOMETERS				**771.**	**2328.**	**4167.**

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FIGURE 2-A
PROPOSED CONTOURS
(METRIC UNITS)

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 1.9 KW 126 M HAAT

FM COVERAGE
****

TOM SEABASE KALISPELL, MONTANNA

CHANNEL NO. 292 A FREQUENCY 106.3 MHZ

CENTER OF RADIATION 3835. FEET AMSL

COORDINATES: 48-10-34 / 114-20-53

BEARING DEGREES		2-10 MILE AVERAGE	C.R. HAAT		E.R.P. (KW)	DISTANCE TO CONTOURS (MI) 70.0	60.0	54.0
0.	*	3047.	788.		1.9	11.8	20.3	27.1
15.		3022.	813.		1.9	12.0	20.6	27.4
30.		2984.	851.		1.9	12.2	21.0	27.9
45.	*	2985.	851.		1.9	12.2	21.0	27.9
60.		2973.	863.		1.9	12.3	21.2	28.0
75.		2932.	903.		1.9	12.6	21.6	28.5
90.	*	2912.	923.		1.9	12.7	21.8	28.8
105.		2909.	926.		1.9	12.7	21.9	28.8
120.		2910.	925.		1.9	12.7	21.9	28.8
135.	*	2963.	873.		1.9	12.4	21.3	28.1
150.		3436.	400.		1.9	8.2	14.8	20.3
165.		4050.	-215.	D	1.9	4.1	7.4	10.5
180.	*	4711.	-876.	D	1.9	4.1	7.4	10.5
195.		4380.	-545.	D	1.9	4.1	7.4	10.5
210.		4100.	-264.	D	1.9	4.1	7.4	10.5
225.	*	3479.	356.		1.9	7.8	14.1	19.3
240.		3692.	143.		1.9	4.9	8.8	12.6
255.		3823.	12.	D	1.9	4.1	7.4	10.5
270.	*	3792.	43.	D	1.9	4.1	7.4	10.5
285.		3826.	9.	D	1.9	4.1	7.4	10.5
300.		3908.	-73.	D	1.9	4.1	7.4	10.5
315.	*	3480.	356.		1.9	7.8	14.1	19.3
330.		3157.	678.		1.9	10.9	18.8	25.6
345.		3085.	750.		1.9	11.5	19.8	26.6
AVERAGE	*	**3421.**	**414.**	**Feet**				
		AREA IN SQUARE MILES				**298.**	**899.**	**1609.**

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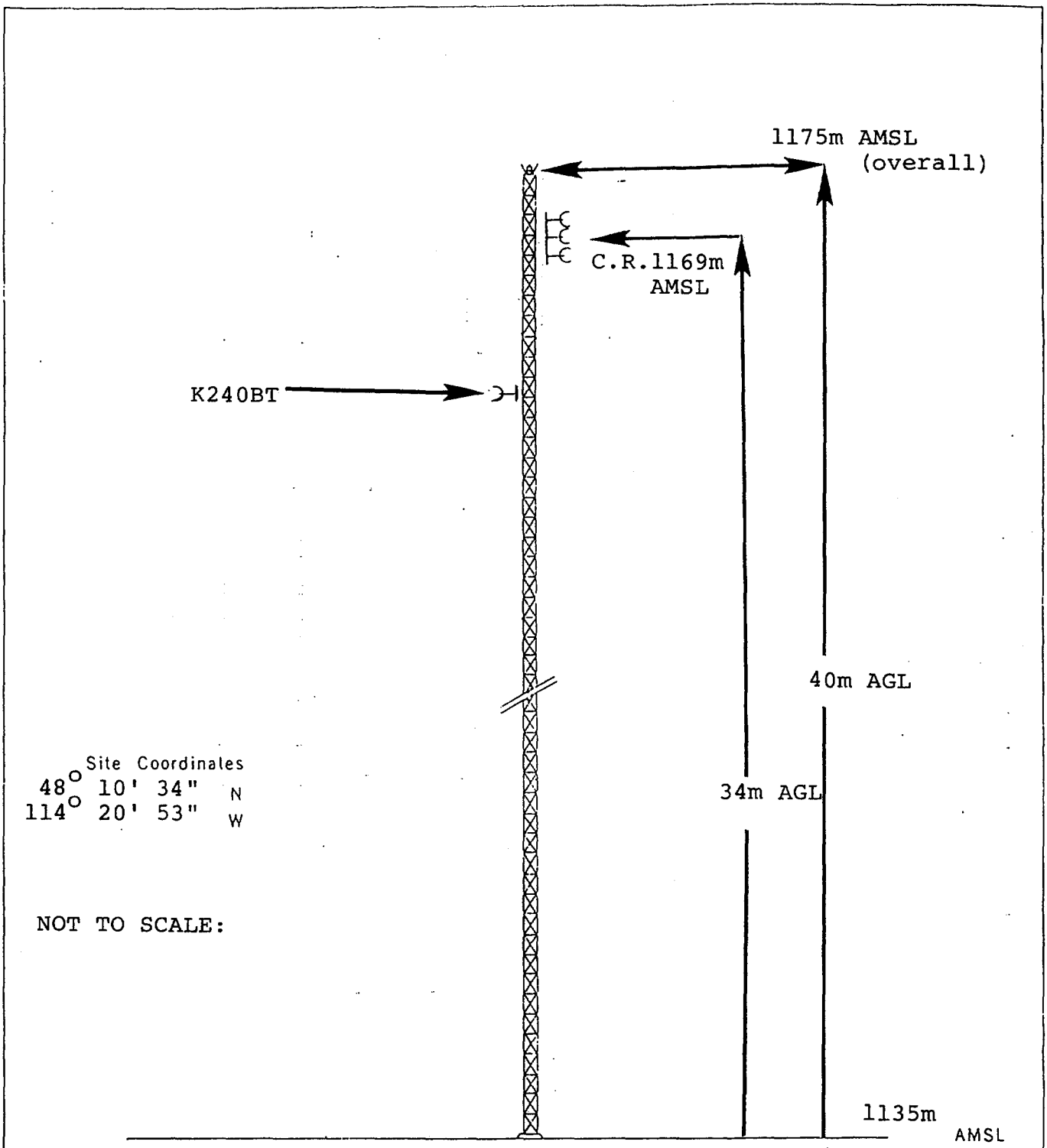
Broadcast Telecommunications Consultant

FIGURE 2-B
PROPOSED CONTOURS
(ENGLISH UNITS)

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 1.9 KW 126 M HAAT



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

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FIGURE 3
VERTICAL TOWER SKETCH
TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 1.9 KW 126 M HAAT

********** FM CHANNEL STUDY NO. 1 - W. LEE SIMMONS & ASSOCIATES - HILTON HEAD ISLAND, SC - 23-SEP-91 09:55:23 **********
********** LAST UPDATE: 910710 **********

	292 A FM	POLARIZATION	ERP (KW) HOR PLN	ERP (KW) RM TILT	HAAT (METER)	RCAMSL (METER)
KALISPELL MT US						
48.1034 114.2053 (D.MMSS)		HORIZONTAL	1.900	0.000	0.0	1169
		VERTICAL	1.900	0.000	0.0	1169

THE FOLLOWING CONTOURS ARE CALCULATED USING:
ERP= 1.900 (KW) 2.8 (DBK) HAAT= 126.3 (METERS)

INTERFERING	DOMESTIC DBU	DOMESTIC KM	CANADIAN DBU	CANADIAN KM
CO CHANNEL	(40.0)	73.7	(34.0)	73.9
1ST ADJACENT	(54.0)	36.5	(48.0)	24.9
2ND ADJACENT	(80.0)	7.6	(74.0)	5.3
3RD ADJACENT	(100.0)	2.1	(94.0)	1.7
PROTECTED	(60.0)	24.2	(54.0)	33.2
CITY GRADE	(70.0)	13.5		

CALCULATED HAAT FROM TOPO DATA BASE

AZIMUTH DEGREES	HAAT (METERS)	HAAT (FEET)	CONTOURS (KM) 70 DBU	60 DBU	54 DBU
0.0	239.9	787.0	18.9	32.6	43.6
45.0	259.1	849.9	19.7	33.8	44.8
90.0	281.2	922.6	20.5	35.1	46.3
135.0	265.7	871.7	19.9	34.2	45.3
180.0	-265.2	-870.1	6.6	11.9	16.8
225.0	107.8	353.7	12.5	22.6	30.9
270.0	13.2	43.3	6.6	11.9	16.8
315.0	109.1	357.9	12.6	22.7	31.1
AVERAGE	126.3	414.5	13.5	24.2	33.2

****

THE CANADIAN BORDER IS 91.6 KM ON A BEARING OF 0.0 DEG. TRUE

****

AZIMUTH FROM	AZIMUTH TO	CALL	STS	FILE NUMBER	CITY	ST	C	LAT (D.MMSS)	LONG	REL	CHN	ERP (KW) HORZ	ERP (KW) VERT	HAAT (M)	D A (KM)	I-CON F5010 (KM)	P-CON F5050 (KM)	DIST (KM)	INTE RSEP (KM)	PROT RSEP (KM)	REZLT IR	REZLT IC
303.6	121.9		VAC		Creston	BC	C	49.0956	116.4039	1ST	291B	H	V					203.8	149.			
					COMMENTSPECIAL NEGOTIATED SHORT-SPACED ALLOCATION.													**COMMENT**				
50.8	230.8		ADD		Kalispell MT A	48.1142	114.1848	CO	292A	H	V							3.3	115.		-	
					COMMENTPRM-Canadian Concurrence required-Pet for Rec													**COMMENT**				

****

**** NORMAL TERMINATION FM CHANNEL STUDY NO. 1 **** 23 FM RECORDS WERE CONSIDERED, OF WHICH 2 WERE PRINTED ABOVE ****

W. Lee Simmons
Broadcast Telecommunications Consultant

FIGURE 4
CHANNEL ALLOCATION STUDY

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 1.9 KW 126 M HAAT

1. Does the applicant propose to employ five or more full-time employees? ☐ Yes ☒ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC 396-A).

SECTION VII - CERTIFICATIONS

1. Has or will the applicant comply with the public notice requirement of 47 C.F.R. Section 73.3580? ☒ Yes ☐ No

2. Has the applicant reasonable assurance, in good faith, that the site or structure proposed in Section V of this form, as the location of its transmitting antenna, will be available to the applicant for the applicant's intended purpose? ☒ Yes ☐ No

If No, attach as an Exhibit a full explantion. Exhibit No.

3. If reasonable assurance is not based on applicant's ownership of the proposed site or structure, applicant certifies that it has obtained such reasonable assurance by contacting the owner or person possessing control of the site or structure.

Name of Person Contacted: Sam Waldenburg

Telephone No. *(include area code)*: (406) 752-5373

Person contacted: *(check one box below)*

☒ Owner ☐ Owner's Agent ☐ Other *(specify)*

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. *(See Section 304 of the Communications Act of 1934, as amended.)*

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT. U.S. CODE, TITLE 18, SECTION 1001.

I certify that the statements in this application are true and correct to the best of my knowledge and belief, and are made in good faith.

Name of Applicant	Signature
Tom Seabase	
Date	**Title**
September 25, 1991	Owner

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, analysts, engineers and applications examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested authority.

Public reporting burden for this collection of information is estimated to vary from 71 hours 45 minutes to 301 hours 30 minutes with an average of 118 hours 28 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Office of Managing Director, Washington, D.C. 20554, and to the Office of Management and Budget, Paperwork Reduction Project (3060-0027), Washington, D.C. 20503.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.